

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name: that I verily believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought in the application entitled:

DIGITAL VIDEO PROCESSING METHOD AND APPARATUS THEREOF

which application is:

☐ the attached application  
(for original application)

x Application No. 09/497,522  
filed February 4, 2000

(for declaration not accompanying application)

that I have reviewed and understand the contents of the specification of the above-identified application, including the claims, as amended by any amendment referred to above; that I acknowledge my duty to disclose information of which I am aware which is material to the patentability of this application under 37 C.F.R. 1.56, that I hereby claim priority benefits under Title 35, United States Code §119, §172 or §365 of any provisional application or foreign application(s) for patent or inventor's certificate listed below and have also identified on said list any foreign application for patent or inventor's certificate on this invention having a filing date before that of any foreign application on which priority is claimed:

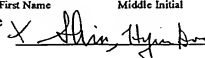
Application Number	Country	Filing Date	Priority Claimed	
			Yes	No

I hereby claim the benefit of Title 35, United States Code §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge my duty to disclose any information material to the patentability of this application under 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Filing Date	Status
60/118,750	February 5, 1999	Pending

I hereby appoint John H. Mion, Reg. No. 18,879; Thomas J. Macpeak, Reg. No. 19,292; Robert J. Seas, Jr., Reg. No. 21,092; Darryl Mexic Reg. No. 23,063; Robert V. Sloan, Reg. No. 22,775; Peter D. Olexy, Reg. No. 24,513; J. Frank Osha, Reg. No. 24,625; Waddell A. Biggar Reg. No. 24,861; Louis Gubinsky, Reg. No. 24,835; Neil B. Siegel, Reg. No. 25,200; David J. Cushing, Reg. No. 28,703; John R. Inge, Reg. No. 26,916; Joseph J. Ruch, Jr., Reg. No. 26,577; Sheldon I. Landsman, Reg. No. 25,430; Richard C. Turner, Reg. No. 29,710; Howard I. Bernstein, Reg. No. 25,665; Alan J. Kasper, Reg. No. 25,426; Kenneth J. Burchfiel, Reg. No. 31,333; Gordon Kit, Reg. No. 30,764; Susan Mack, Reg. No. 30,951; Frank L. Bernstein, Reg. No. 31,484; Mark Boland, Reg. No. 32,197; William H. Mandir, Reg. No. 32,156; Bria W. Hannon, Reg. No. 32,778; Abraham J. Rosner, Reg. No. 33,276; Bruce E. Kramer, Reg. No. 33,725; Paul F. Neils, Reg. No. 33,102; Bre S. Sylvester, Reg. No. 32,765; Robert M. Masters, Reg. No. 35,603; George F. Lehnigk, Reg. No. 36,359; John T. Callahan, Reg. No. 32,60 and Steven M. Gruskin, Reg. No. 36,818, my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and request that all correspondence about the application be addressed to SUGHRUE, MION, ZINT MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3213.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date	10 July 2000		First Inventor	Hyun-doo SHIN		
				First Name	Middle Initial	Last Name
Residence	Sungnam-city	Kyunki-do, Republic of Korea	Signature			
	City	State/Country				
Post Office Address:	510-1302 Mujigae Maeul Cheonggu Apt., 221 Kumi-dong Bundang-gu, Sungnam-city, Kyunki-do, Republic of Korea					
Citizenship	U.S.A.					

Date 10 July 2000 Second Inventor Yang-lim CHOI  
First Name Middle Initial Last Name  
Residence Paldal-gu, Kyungki-do, Republic of Korea Signature Choi, Yang-lim  
City State/Country

Post Office Address: 102-1112 Wooman Sunkyoung Apt., 105 Wooman-dong, Paldal-gu, Kyungki-do, Republic of Korea

Citizenship Republic of Korea

Date \_\_\_\_\_ Third Inventor B.S. MANJUNATH  
First Name Middle Initial Last Name  
Residence Santa Barbara CA, 93106-9560 Signature B. Manjunath 06/06/01  
City State/Country

Post Office Address: Department of Electrical and Computer Engineering, University of California, Santa Barbara, CA 93106-9560, U.S.A.

Citizenship Indian

Date \_\_\_\_\_ Fourth Inventor Xinding SUN  
First Name Middle Initial Last Name  
Residence Santa Barbara CA, 93106-9560 Signature Sun X.D. 06/06/00  
City State/Country

Post Office Address: Department of Electrical and Computer Engineering, University of California, Santa Barbara, CA 93106-9560, U.S.A.

Citizenship P. R. China

Date \_\_\_\_\_ Fifth Inventor \_\_\_\_\_  
First Name Middle Initial Last Name  
Residence \_\_\_\_\_ Signature \_\_\_\_\_  
City State/Country

Post Office Address: \_\_\_\_\_

Citizenship \_\_\_\_\_

Date \_\_\_\_\_ Sixth Inventor \_\_\_\_\_  
First Name Middle Initial Last Name  
Residence \_\_\_\_\_ Signature \_\_\_\_\_  
City State/Country

Post Office Address: \_\_\_\_\_

Citizenship \_\_\_\_\_

## PATENT

Attorney Docket No. Q53231

## ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

Name: BANGALORE S. MANJUNATH  
Address: 1071 N. Patterson Avenue  
Santa Barbara, CA 93111

Nationality: India

**FILED****JAN 31 2001**

hereby sell(s), assign(s) and transfer(s) to ASSIGNEE:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, A CALIFORNIA CORPORATION, 111 FRANKLIN STREET, 12<sup>th</sup> Floor, OAKLAND, CA 94607-5200,

and the successors, assigns and legal representatives of the ASSIGNEE, the entire right, title and interest for the United States and its territorial possessions and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

**DIGITAL VIDEO PROCESSING METHOD AND APPARATUS THEREOF**

and which is found in

- (a) ☐ U.S. provisional patent application filed herewith and listing the above named person(s) as inventor(s).
- (b) ☐ U.S. patent application filed herewith listing the above named person(s) as inventor(s).
- (c) ☒ U.S. patent application serial no. 09/497,522, filed on February 4, 2000.
- (d) ☐ U.S. Patent No.: \_\_\_\_\_, issued \_\_\_\_\_.

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenant(s) that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said Invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal

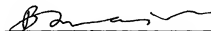
representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) request(s) the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, the Regents of the University of California.

Date:

Sept 26, 2000

Inventor:

BANGALORE S. MANJUNATH

## Assignment

Whereas, I/We, Hyun-doo SHIN and Yang-lim CHOI of

510-1302 Mujigae Maeul Cheonggu Apt., 221 Kumi-dong, Bundang-gu,  
Sungnam-city, Kyungki-do, Republic of Korea, and 102-1112 Wooman Sunkyung, 105  
Wooman-dong, Paldal-gu, Kyungki-do, Republic of Korea

respectively, hereinafter called assignor(s), have jointly invented with others certain  
improvements in **DIGITAL VIDEO PROCESSING METHOD AND APPARATUS  
THEREOF** and executed an application for Letters Patent of the United States of America  
therefor on July 10, 2000; and

Whereas, **SAMSUNG ELECTRONICS CO., LTD., 416 Maetan-dong, Paldal-gu,  
Suwon-city, Kyungki-do, Republic of Korea** (assignee), desires to acquire our entire right,  
title, and interest in the application and invention, and to any United States patents to be obtained  
therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named  
assignee, its successors and assigns, our entire right, title and interest in the application and the  
invention disclosed therein for the United States of America and all countries foreign thereto,  
including rights of priority under the International Convention of Paris (1883) as amended, and  
I/we request the Commissioner of Patents to issue any Letters Patent granted upon the invention  
set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that  
the assignee may apply for foreign Letters Patent on the invention and I/we will execute without  
further consideration all papers deemed necessary by the assignee in connection with the United  
States and foreign applications when called upon to do so by the assignee.

I/We hereby authorize and request our attorneys SUGHRUE, MION, ZINN, MACPEAK  
& SEAS, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3212 to insert here  
in parentheses (Application number 09/497,522, filed **February 4, 2000**) the filing date and  
application number of said application when known.

Date: Shin Hyun Doo 28 December 2000  
s/ Hyun-doo SHIN

Date: Choi Yang-lim 28 December 2000  
s/ Yang-lim CHOI

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)